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| 10/666,577 | 09/22/2003 | Zhichen Xu | 200300594-1 | 8618 |

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| EXAMINER |
|------------------------|
| LEROUX, ETIENNE PIERRE |

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2161 | |

| NOTIFICATION DATE | DELIVERY MODE |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/666,577

Applicant(s)

XU ET AL.

Examiner

Etienne P. LeRoux

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2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 6-21, 23-35, 40, 41 and 43-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-21, 23-35, 40, 41 and 43-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/22/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Claim Status:

Claims 1, 4, 6-21, 23-35, 41 and 43-45 are pending. Claims 1, 4, 6-21, 23-35, 41 and 43-45 are rejected as detailed below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “tuple” in claim 1 is used by the claim to mean “statement,” while the accepted meaning of tuple is a row which includes a set of related values, one for each column in a relational database management system.¹ The term is indefinite because the specification does not clearly redefine the term. For purposes of this Office Action the claimed “tuple” will be interpreted as a statement.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 4, 6-10, 12-21, 23-35, 40, 41 and 43-45 are rejected under 35 U.S.C. 102(a) as being anticipated by Pub No US 2003/0145306 (Melahn et al).

Regarding claim 1, 10, 20, 34, 35, 40, 41, 45, Melahn discloses a first object identifier identifying a first object stored in the file system, wherein the first object comprises a first file stored in the file system [source file, para. 18 stored in repository 104, Fig 2], a second object identifier identifying a second object stored in the file system, the second object being related to the first object [target file is built from the source file using a build utility 112, para. 18], wherein the second object comprises at least one of a second file generated from the first file [target file is built from the source file using a build utility 112, para. 18] and metadata generated from the first file [build indicators of the source file and the target file are set to a common value, para. 36] and a relation identifier [build tools 114, para. 19, Fig 2, time stamp indicates up-to-date files, para. 21, version indicators, para. 28] identifying a relationship between the first object and the second object wherein the data model includes a tuple in a format and order comprising the first identifier, the relation identifier and the second object identifier [is the repository target file up-to-date with respect to the repository source file, fig 3A, step 166]

¹ Microsoft Computer Dictionary, Fifth Edition

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determining whether the first object in the file system is accessed [source file, para. 32],
identifying a precondition associated with the first object in response to the first object being
accessed [version of source file, para. 32] performing an action in response to the predetermined
condition existing [build request, para. 32] wherein the relation identifier identifies the
predetermined condition and action [build request, para. 32, includes repository indicator, name
of file, location of file, name of source file, versioning information]

Regarding claim 4, 21, Melahn discloses wherein the relation identifier is a semantic of
the first file [determining whether the repository target file is up-to-date regarding the source file,
para. 9]

Note: Examiner interprets semantic as meaning

Regarding claim 6, Melahn discloses wherein the relation identifier comprises a
property of the first object and the second object comprises a value of the property for the first
object [build indicators of the source file and the target file are set to a common value, para. 36]

Regarding claim 7, Melahn discloses wherein the data model represents a function
operable to be performed in the semantic file system [target file is built from the source file using
a build utility 112, para. 18]

Regarding claim 8, 23, Melahn discloses wherein the function is associated with one or
more of generating a view of the objects stored in the semantic file system, restricting access to
an object in the file system, searching in the semantic file system, performing an action based on
at least one predetermined condition, and performing archival functions in the semantic file
system [Fig 2, repository 104]

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Regarding claim 9, Melahn discloses wherein the relation identifier identifies a dependency between the first object and the second object [build indicators of the source file and the target file are set to a common value, para. 36]

Regarding claim 12, 28, Melahn discloses wherein the dependency is associated with one or more users or one or more applications [Fig 2, content developers 108]

Regarding claim 13, 24, 43 Melahn discloses wherein the dependency is used to generate file space views for the one or more users or for the one or more applications [access by specified content developers, para. 30]

Regarding claim 14, 31, Melahn discloses wherein the relation identifier identifies the second object as including property semantic information for the first object, the property semantic information including statistical information for the first object [time stamps for the files indicate when they were created or last updated, para. 36]

Regarding claim 15, Melahn discloses wherein the relation identifier identifies the second object as including context semantic information for the first object, the context semantic information being associated with access patterns for the first object [para. 30, repository is configured to allow access by specified content developers]

Regarding claim 16, Melahn discloses wherein the first object is a file and the access patterns are associated with one or more other files accessed before or after the file [versioning information identifies specific version of the source file and the target file respectively, para. 32]

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Regarding claim 17, Melahn discloses wherein the relation identifier identifies the second object as including content-based semantic information associated with content of the first object [build report, para. 19]

Regarding claim 18, 32, Melahn discloses wherein the data model is used to represent multiple types of relation identifiers in a schema [file time stamp, WebDAV time stamp, indicator indicating when file was created or built, para. 35]

Regarding claim 19, 25, 26, Melahn discloses wherein the schema is modifiable to include a new relation identifier or to remove a relation identifier currently in the schema [target file can be built from a plurality of source files, para. 20]

Regarding claim 27, Melahn discloses wherein at least one of the plurality of relation metadata is determined through property inheritance from the schema [build utility 112 builds updated target files from source files using known build tools 114, para. 19]

Regarding claim 29, Melahn discloses extracting semantic information for the objects and storing the semantic information [build report may be stored in file system 124 for viewing by content developers 108, para. 19]

Regarding claim 30, Melahn discloses receiving a request for information stored in the file system and searching the semantic information to identify any files stored in the file system that meet the request [para. 32]

Regarding claim 33, 44, Melahn discloses returning results of the search using a precision variable, wherein the precision variable is related to a relevance of search results to the search

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request [at step 152, a repository associated with the file and a source file on which the file is dependent is identified, para. 33]

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melahn as applied to claim 9 above, and further in view of Pub No US 2003/0033590 (Leherbauer), hereafter Leherbauer.

Regarding claim 10, Melahn discloses the elements of the claimed invention as noted above but does not disclose wherein the dependency is associated with a hierarchal file space. Leherbauer discloses wherein the dependency is associated with a hierarchal file space [para. 25]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Melahn to include above limitation as taught by Leherbauer for the purpose of establishing a baseline such that diverging modifications can be tracked [para. 25].

Response to Arguments

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Applicant's arguments filed 11/13/2007 have been fully considered but are moot based on above new grounds of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached Monday through Friday between 8:00 am and 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

12/28/2007


ETIENNE LEROUX
PRIMARY EXAMINER